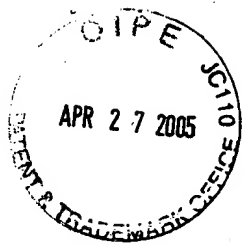


FIG. 1 (PRIOR ART)



250

Accelerator Engine 200

2003

DSP 102

RAM 106

ROM 110

I/O INTERFACE 114

4005

FIG. 2

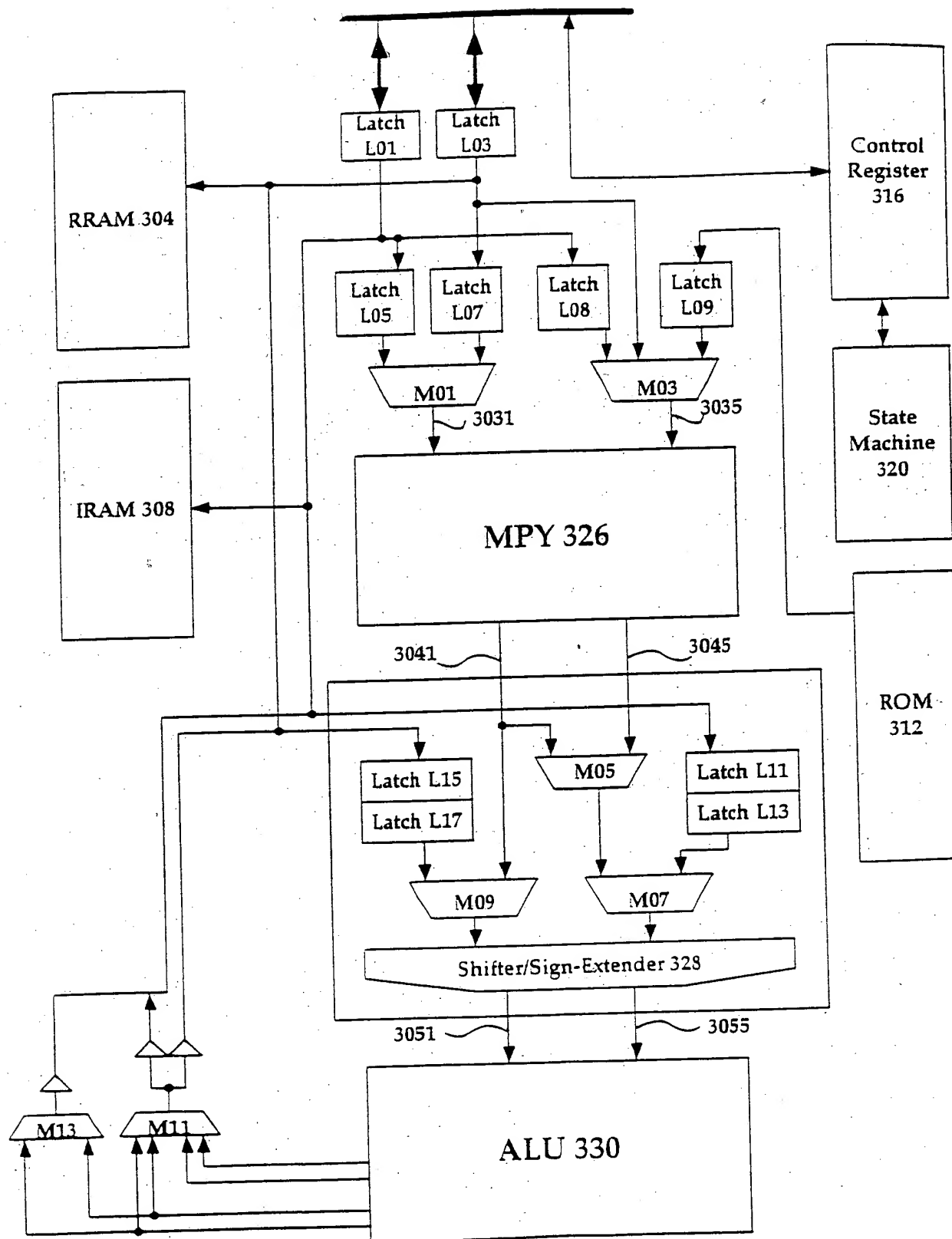
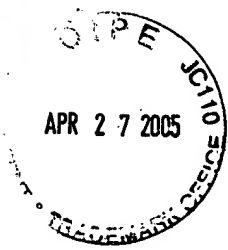


FIG. 3



Cycle	MPY 326	ALU A	ALU B	RRAM 304	IRAM 308	ROM 312
1				read b_r	read b_i	read c_r
2						read c_i
3	$b_r * c_r$					read c_i
4	$b_i * c_i$					read c_r
5	$b_r * c_i$					
6	$b_i * c_r$	$A = b_r * c_r$ $A_0 = A - (b_i * c_i)$				
7						
8			$B = b_r * c_i$			
9			$B_0 = B + (b_i * c_r)$			
10				write b_r	write b_i	
11						
12						

FIG. 4A